

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Charles Edward ANDERSON, IV

Application No. 10/080,671

Filed: February 25, 2002

For: **System, Method And Computer  
Program Product For Selectively  
Caching Domain Name System  
Information On A Network Gateway**

Confirmation No. 8173

Art Unit: 2141

Examiner: Chirag R. PATEL

Atty. Docket: 1875.1990000

**Supplemental Brief on Appeal Under 37 C.F.R. § 41.37**

*Mail Stop Appeal Brief - Patents*

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

A Notification of Non-Compliant Appeal Brief was mailed on September 19, 2008. Appellant hereby submits a corrected Summary of Claimed Subject Matter responsive to the Notification. As requested in the Notification, only the relevant section is included in this Supplemental Brief, and Appellant refers the Board to the Appeal Brief filed September 5, 2008 for the remaining sections.

It is not believed that extensions of time are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

***V. Summary of Claimed Subject Matter (37 C.F.R. § 41.37(c)(1)(v))***

A concise explanation of the subject matter defined in each of the independent claims on appeal (i.e., claims 1, 10, 21, 22, 30, and 39) is provided below. The explanation refers to the specification, as presented in the patent application publication, by paragraph number and to the drawings by reference characters. Reference is made to supporting embodiments disclosed in the specification, although it is understood that the claims should not be limited to the specific embodiments to which reference is made.

Claims 1, 10, 21, 22, 30, and 39 are broadly directed to a system, method, or computer program product for identifying frequently accessed domain names in a customer premises equipment (“CPE”). FIG. 8 of the Instant Published Application is a flowchart depicting steps by which a search application running at a CPE is able to identify frequently accessed domain names, in accordance with an embodiment of the present invention. (Para. [0098]; FIG. 8). A search application searches files on the CPE that hold frequently accessed domain names such as, for example, files associated with a web browser. (Para. [0099]). These domain names are then provided to a gateway device. (Para. [0100]).

***A. Claim 1***

Claim 1 recites a method for identifying frequently accessed domain names in a customer premises equipment (e.g., FIG. 2, elements 202, 212, and 214) that includes a memory (e.g., FIG. 4, elements 446 and 448) and a communication interface (e.g., FIG. 4, element 464). The frequently accessed domain names are provided to a network gateway (e.g., FIG. 2, element 204) for use in domain name caching (e.g., FIG. 2, element 216; Para. [0100]). The method comprises the steps of:

- searching files in the memory to identify the frequently accessed domain names (e.g., FIG. 8, element 804; Para. [0098] - [0099]); and

- providing the frequently accessed domain names to the communication interface for transmission to the network gateway (e.g., FIG. 8, element 806; Para. [0100]) over a communication path (e.g., FIG. 4, element 466).

The files in the memory comprise application data files that hold frequently accessed domain names (e.g., Para. [0099]).

***B. Claim 10***

Claim 10 recites a method for selectively caching domain name system information on a network gateway (e.g., FIG. 2, element 204) that includes a cache (e.g., FIG. 2, element 216), wherein the network gateway is attached to a customer premises equipment (e.g., FIG. 2, elements 202, 212, and 214) that includes a memory (e.g., FIG. 4, elements 446 and 448).

The method comprises the steps of:

- searching files in memory to identify a frequently accessed domain name (e.g., FIG. 8, element 804; Para. [0098] - [0099]);
- providing the frequently accessed domain name from the customer premises equipment to the network gateway (e.g., FIG. 8, element 806; Para. [0100]);
- generating, in the gateway, a domain name system query that includes the frequently accessed domain name (e.g., FIG. 8, element 808; Para. [0103]);
- transmitting the domain name system query from the network gateway to a network (e.g., FIG. 2, element 206) for resolution (e.g., FIG. 8, element 810; Para. [0104]);

- receiving, in the gateway, a response to the domain name system query from the network that includes the frequently accessed domain name and a corresponding IP address (e.g., FIG. 8, element 812; Para. [0105]); and
- storing the frequently accessed domain name and the corresponding IP address in the cache (e.g., FIG. 8, element 814; Para. [0105]).

The files in the memory comprise application data files that hold frequently accessed domain names (e.g., Para. [0099]).

*C. Claim 21*

Claim 21 recites a method for selectively caching domain name system information on a network gateway (e.g., FIG. 2, element 204) that includes a cache (e.g., FIG. 2, element 216), wherein the network gateway is attached to a customer premises equipment (e.g., FIG. 2, elements 202, 212, and 214) that includes a memory (e.g., FIG. 4, elements 446 and 448).

The method comprises the steps of:

- searching files in memory to identify a frequently accessed domain name (e.g., FIG. 9, element 904; Para. [0098] - [0099] and [0107]);
- generating, in the customer premises equipment, a domain name system query that includes the frequently accessed domain name (e.g., FIG. 9, element 906; Para. [0108]);
- providing the domain name system query from the customer premises equipment to the network gateway (e.g., FIG. 9, element 908; Para. [0108]);

- transmitting the domain name system query from the network gateway to a network (e.g., FIG. 2, element 206) for resolution (e.g., FIG. 9, element 910; Para. [0109]);
- receiving, in the gateway, a response to the domain name system query from the network that includes the frequently accessed domain name and a corresponding IP address (e.g., FIG. 9, element 912; Para. [0110]); and
- storing the frequently accessed domain name and the corresponding IP address in the cache (e.g., FIG. 9, element 914; Para. [0110]).

The files in the memory comprise application data files that hold frequently accessed domain names (e.g., Para. [0099]).

***D. Claim 22***

Claim 22 recites a customer premises equipment (e.g., FIG. 2, elements 202, 212, and 214) comprising:

- a memory (e.g., FIG. 4, elements 446 and 448) that stores files, wherein the files comprise application data files that hold frequently accessed domain names (e.g., Para. [0099]);
- a communication interface (e.g., FIG. 4, element 464) for transmitting information to a network gateway (e.g., FIG. 2, element 204); and
- a processor coupled to the memory and communication interface (e.g., FIG. 4, element 444).

The processor is configured to search the files in the memory to identify frequently accessed domain names (e.g., FIG. 9, element 904; Para. [0098] - [0099] and [0107]) and to

provide the frequently accessed domain names to the communication interface for transmission to the network gateway (e.g., FIG. 9, element 908; Para. [0108]).

*E. Claim 30*

Claim 30 recites a system for selectively caching domain name system information in a network gateway. The system comprises:

- a customer premises equipment (e.g., FIG. 2, elements 202, 212, and 214) including a memory (e.g., FIG. 4, elements 446 and 448) that stores files (e.g., Para. [0099]), a communication interface (e.g., FIG. 4, element 464) for transmitting information over a communication path (e.g., FIG. 4, element 466), and a CPE processor (e.g., FIG. 4, element 444) coupled to the memory and the communication interface, wherein the CPE processor is configured to search the files to identify a frequently accessed domain name (e.g., FIG. 8, element 804; Para. [0098] - [0099]) and to provide the frequently accessed domain name to the communication interface for transmission over the communication path (e.g., FIG. 8, element 806; Para. [0100]); and
- a network gateway (e.g., FIG. 2, element 204; FIG. 5, element 204a) including a cache (e.g., FIG. 2, element 216; FIG. 5, element 528), a CPE interface for receiving information over the communication path (e.g., FIG. 5, elements 508, 510, and 512; Para. [0075]), a network interface for transmitting information over a network (e.g., FIG. 5, element 516; Para. [0063]), and a gateway processor (e.g., FIG. 5, element 518) coupled to the cache, the CPE interface, and the network interface, the gateway processor configured to receive the frequently accessed domain name from the communication path via the CPE interface (e.g., Para. [0100] - [0102]), to generate a domain name system query that includes the frequently accessed domain name (e.g.,

FIG. 8, element 808; Para. [0103]), to provide the query to the network interface for transmission to a network (e.g., FIG. 2, element 206) for resolution (e.g., FIG. 8, element 810; Para. [0104]), to receive a response to the query from the network via the network interface that includes the frequently accessed domain name and a corresponding IP address (e.g., FIG. 8, element 812; Para. [0105]), and to store the frequently accessed domain name and the corresponding IP address in the cache (e.g., FIG. 8, element 814; Para. [0105]).

The files in the memory comprise application data files that hold frequently accessed domain names (e.g., Para. [0099]).

***F. Claim 39***

Claim 39 recites a computer program product (e.g., Para. [0056]) comprising a computer usable medium (e.g., Para. [0056]) having computer program logic (e.g., Para. [0057]) for enabling a processor (e.g., FIG. 4, element 444) in a customer premises equipment (e.g., FIG. 2, elements 202, 212, and 214) to identify frequently accessed domain names to be provided to a network gateway (e.g., FIG. 2, element 204) for use in domain name system caching, the customer premises equipment further including a memory (e.g., FIG. 4, elements 446 and 448) and a communication interface (e.g., FIG. 4, element 464).

The computer program product comprises:

- means for enabling the processor to search files in the memory to identify the frequently accessed domain names (e.g., FIG. 8, element 804; Para. [0098] - [0099]); and
- means for enabling the processor to provide the frequently accessed domain names to the communication interface for transmission to the network gateway (e.g.,



FIG. 8, element 806; Para. [0100]; *see also* FIG. 4, element 466, “communication path”).

The files in the memory comprise application data files that hold frequently accessed domain names (e.g., Para. [0099]).

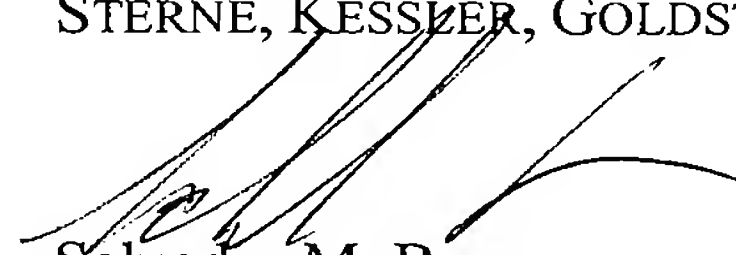
Each of independent claims 1, 10, 21, 22, 30, and 39 find support *at least* in the above-referenced sections of the Published Application. The remaining claims draw similar support from the aforementioned sections of the Published Application.

### ***Conclusion***

Appellant respectfully requests that the Board reverse the Examiner’s final rejection of claims 1-50 under 35 U.S.C. §§ 102 and 103 and remand this application for issue.

Respectfully submitted,

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